Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for imaging an array of discrete reaction sites on the surface of a solid support, to detect the presence of molecules on the array, said molecules being detectably labelled, comprising:

(i) imaging the array and detecting a signal ~~representing~~ from a first molecule located on the solid support at a known position within ~~on~~ the array;

(ii) by reference to the first molecule, aligning an individual inspection ~~windows~~ window in registration with each ~~the~~ discrete reaction ~~sites~~ site; and

(iii) determining the amount of detectable signal in each window, to thereby detect the presence of the molecules, wherein detection of the first molecule is carried out by aligning a first inspection window within a region of the support that includes the first molecule and searching within the window to detect the first molecule.

2. (Cancelled)

3. (Previously Presented) A method according to claim 1, wherein the first inspection window defines a two-dimensional array of pixels and searching is carried out by scanning diagonally the array of pixels and determining values for the pixels.

4. (Previously Presented) A method according to claim 1, wherein, after detecting the first molecule, the first inspection window is repositioned or enlarged so that one or more of the discrete reaction sites is also located within the window, detecting the one or more sites and, by reference to the first molecule and the one or more sites, aligning a further inspection window in registration with each reaction site of the array.

5. (Previously Presented) A method according to claim 1, wherein the array of reaction sites defines a corner within which the first molecule is located.

6. (Previously Presented) A method according to claim 1, wherein step (i) further comprises detecting a second molecule located on the solid support at a known position with respect to the array, and aligning the inspection windows by reference to both first and second molecules.

7. (Previously Presented) A method according to claim 1, wherein imaging is carried out by detecting emitted radiation.

8. (Original) A method according to claim 7, wherein the radiation is chemiluminescent, bioluminescent or fluorescent.

9. (Previously Presented) A method according to claim 1, wherein the molecules of the array are capable of reacting with an analyte.

10. (Previously Presented) A method according to claim 1, wherein the molecules of the array are polynucleotides, antibodies, proteins or organic compounds.

11. (Previously Presented) A method according to claim 1, wherein the solid support is less than 1 cm^2.

12. (Previously Presented) A method according to claim 1, wherein the solid support is a ceramic, silicon or glass material.

13. (Previously Presented) A method according to claim 1, wherein the molecules of the array are covalently attached to the surface of the solid support.

14. (Previously Presented) A method according to claim 1, wherein the signal detected in step (i) must be above a pre-defined value in order to proceed with steps (ii) and (iii).

15-16. (Cancelled)